Define

COI & Department of Health

Medicines Labelling Research

Final Report

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May 2007

COI: 278639 / Define: 1581

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Table of Contents

Appendix

I Introduction

A. Background

Over one billion pounds' worth of medication is incinerated in the UK every year.[1] This represents approximately one fifth of the national NHS budget. In England in 2004-05, 614 tonnes of returned drugs had to be disposed of.[2] Such medication is comprised of left-overs (half-finished or never-started courses).

Furthermore, these levels represent only that which is brought back to Pharmacists for 'correct' disposal. The true level of medication wastage – through unauthorised routes – is likely to be much greater.

In light of these facts, the Department of Health was charged with exploring the effects of more information on wastage levels. The research question was defined as: *"Would people continue to waste such high levels of medication if they were aware of the actual cost of their medicines?".*

In light of this, Define was asked to conduct research that looked at (specifically) the effect of pricing information on medicine labels themselves, and (more generally), the reactions and requirements generated by consumers themselves towards an effective solution.

[1] Journal of Medical Economics 2006; 9: 27-44

[2] When medicines are wasted so much is lost: to society as well as patients, Mackridge-A; Marriott-J - Pharmaceutical Journal 2004:272:12

B. Research Objectives

Overall: To understand the potential for on-bottle pricing information to reduce medicine wastage and to establish parameters for how this could work

To achieve this, the research had to provide a comprehensive picture of patient behaviour and understanding.

1. Firstly, it was necessary to **examine** background awareness and attitudes towards health, illness and medication. This was to give a broad landscape within which to site patient wastage behaviour – reasons for any such wastage, and factors influencing their attitudes.

2. Against this backdrop, it would be possible to **explore** the responses to the on-bottle labelling information, which included a wide range of suggestions and stimulus materials that might reduce medicine wastage.

3. Finally, it was important to **establish** in collaboration with the respondents themselves, other (perhaps unexpected routes or suggestions that, from their experience would encourage and help them to reduce wastage). These routes form part of the suite of conclusions and recommendations.

C. Method and Sample

i) Overview of Research Approach

The research was designed to mine as much current knowledge as possible in order to build a complete picture. A mixed methodology, combining three distinct elements was undertaken as follows:

An initial desk research element to ensure that a wide range of academic research was used to inform the research question and to shape the field element:

⇒ This research was conducted at the library of the Royal Pharmaceutical Society in London over a period totalling some five researcher days.
⇒ A search by keyword was undertaken initially to trawl the databases and to provide initial direction.
⇒ The search terms used and the results of the literature review are appended in full. However, key terms included 'pricing information, reduction in wastage, increasing compliance and so on).
⇒ This wider search was also aided by a list of key references and points provided by the Academic Consultant on the project, Nicky Britten, MA MSc PhD and Professor of Applied Health Care Research at the Peninsula Postgraduate Health Institute and Deputy Director of the Institute of Clinical Education
⇒ Such references were accessed directly; in turn, their sources were considered and searched for in order to investigate areas of 'greatest likelihood for success' as well as drawing from a wider base (through the above key word search).

Qualitative research in the form of focus groups was undertaken with a very broad range of consumers across the country, to provide fresh insights into the issue:

⇒ Eight groups of eight respondents were interviewed – 64 respondent views across a broad spectrum of life stages, ages, class and income levels.

⇒ The research covered an England only geography but included North, South and Midlands.

⇒ Respondents were informed only that the research topic was health and lifestyle, and were pre-tasked (to provide a further mask) on their daily habits. They were not made aware (until the groups) of the real subject of enquiry – namely their behaviour, compliance and wastage of medicines.

⇒ More detailed sampling information is given below in the section on Sample.

A revisit of the desk research provided a final confirmation of any outstanding questions raised in the field:

⇒ Here, the research team sought to verify and 'sense-check' any of the respondent experiences and behaviours (where unexpected).

⇒ Additionally, the research team intended to highlight any current thinking on the range of other respondent-generated solutions that might be forthcoming, and to establish basic parameters in policy for their viability.

⇒ In particular, this final phase was intended to allow a search for any keywords that respondents were using that would be distinct from academic terminology but which might have influence on how the issue was perceived. (In the event, there was little in this area – as will be made clear, respondents simply were not connected to the issue in the first instance).

ii) Sample

From the briefing and literature review, seven factors important for recruitment emerged as being:

1. Age of respondent
    a. to include older people who are more likely to have multiple morbidities and poly-pharmacies and thus to have more medication to waste at the outset
    b. to include working-age respondents as well as the retired, whose prescriptions are automatically free after the age of 65
    c. to include the 'sandwich generation' of respondents who might pay for their own medication but might have elderly relatives with free prescriptions

2. Parents
    a. to cover those who might be paying for their own prescriptions but whose children would automatically have free prescriptions
    b. to include parents of children with serious illnesses who would have life-long and heavy consumption of medicines (and thus might have more opportunity for wastage)

3. Prescription charge
    a. to include those both paying for own prescriptions and getting free prescriptions in order to distinguish the relative value placed on medicines if paid for personally (and the impact this factor has on medicine wastage)

4. Social class
    a. To cover as above, those people who have free prescription
    b. To cover a wide range of income levels, and to understand pricing information relative to household income levels (in order to see whether this factor would have an impact on perception of value – and thus reduce wastage)
    c. To cover a wide spectrum of health and lifestyle measures including propensity to exercise, eat well – many of which are linked with income level

5. The nature of the medication taking
    a. To include those who would take medicines only infrequently

   b. And to cover those who would be on lifelong medication for permanent conditions (such as blood pressure, thyroid, asthma) where medication prescribing and prescription adherence would have a different nature and volume
   c. Counterbalancing of the number of potential wastage situations with the necessity for the medication to control respondent symptoms

6. Gender of respondent
   a. Covering both men and women in order to ensure a balanced sample
   b. To include any factor which might affect compliance
   c. To include any factor which might affect how the possible introduction of pricing information might be received
   d. To interview respondents in single-gender groups in case of sensitivity of medical information and personal history

7. Geographical representation
   a. To allow for as broad a range of views as possible across England
   b. Including the widest perceptions of central government, the health care system
   c. To cover the widest range of GP prescribing behaviours and local expectations around care

Fieldwork took place 21st, 22nd February 2007, in as short a timespan as possible. This was in order to ensure no political or health-related issues would interrupt the research, sensitise the respondents to matters around medicine costs or adversely affect the results between one group and another.

The overall sample was structured as below, with quotas for the groups to include factors discussed above. (The recruitment questionnaire is attached in the Appendix).

Group 1	65+ men (North) – to include range of illnesses ongoing (heart problems, asthma, epilepsy, diabetes) and to be on medication for such. Free prescriptions (because pensioners)
Group 2	65+ females (Mids) to include range of illnesses ongoing (heart problems, asthma, epilepsy, diabetes) and to be on medication for such. Free prescriptions (because pensioners)
Group 3	C2DE parents of children under 15 (Mids) – to include at least two dads (free prescriptions)
Group 4	BC1 parents of children under 15 (South) – to include at least two dads (paying fo prescriptions)
Group 5	25-34 BC1 females (North) – at least two to be parents of a child with a permanent illness/condition (could include severe asthma) (paying for prescriptions)
Group 6	35-54 C2DE females (South) – at least two of whom to be carers of a parent/parent-in-law and at least two to have ongoing illness (e.g. heart problems, asthma, epilepsy, diabetes) and be on medication for such
Group 7	Men 25-34 C2DE (North) – at least two to be carers of a child with a permanent illness/condition
Group 8	Men (45-54) C1C2 (Mids) – to include range of illnesses with at least two to have ongoing illness (heart problems, asthma, epilepsy, diabetes) and be on medication for such

The main aim of the qualitative aspect was to establish the broadest range of views possible on the current live suggestions for communications. In terms of clarity of data derived from the process, the groups demonstrated both intra (and to a very large extent) inter-group consistency, both in terms of their awareness/current behaviour/attitudes and in terms of their responses to the stimulus and preferred solutions.

II Conclusions & Recommendations

Health, Illness and Medicines

1. The vast majority of respondents described themselves as fairly **healthy**. This was true, even where the respondent had multiple symptoms of a diagnosed condition.

2. Respondents measured their health against an internal and very personal barometer, which is based on their **level of control** over their own daily functioning. Where this level of control is taken away from them (by temporary dramatic symptoms, or in the case of a new diagnosis, by not being familiar with their own state) or where it is given away by them (as in the case of hypochondria), the term 'ill' and the discourse of 'illness' is engaged in.

3. For these respondents, **illness** is defined by something other than the symptoms they experience and is related to the level of control and information they expect to have over their daily lives and physical bodies. One person may class themselves as 'just getting older', whereas another with the same symptoms, but with a higher expected level of control over their daily life, may consider they are 'ill'. Some may have almost no physical symptoms, but may have been diagnosed as 'ill' by their doctor and have become reliant on another's knowledge and permission.

4. The majority of respondents (<u>not</u> hypochondriacs) viewed being 'ill' as unwelcome; when their locus of control is outside themselves – with the doctor or the medical profession as a whole - their instinct is to try to regain this control.

5. Medication is viewed in various ways within this dynamic:

a. as a necessary evil, "life-raft" or short-term prop to regain health and control (in which case, it is taken only until the patient feels better);
b. as a symbol of the doctor's control over them – because the doctor decides when and how much is prescribed (and adherence is affected by how this sits with the patient);
c. as *proof of lack of control* (where a diagnosis of 'ill' is needed e.g. for a sick note from work, for employment insurance, for sympathy and attention) – in which case, medication is unlikely to be taken at all;
d. as a talisman against the 'what if' and potential loss of control (medication is likely to be stored and stockpiled);
e. as part of a personal armoury and as a sign of good housekeeping (medication stockpiling is a public and lauded activity);
f. as bounty – signs that they have 'won' against the doctor by being able to elicit medication that the doctor does not really want to give (patients may or may not take the medication);
g. as a currency/gifts – helping others within their circle of influence by offering something of value (patients 'over-order and pass on' spare medication).

> *I feel safer having it in the house just in case I can't get access to the doctors and think what if he has an asthma attack in the middle of the night and the doctor won't come out*
>
> C2DE, 35-54 women (South)

6. The health/illness dynamic thus drives various activities such as stockpiling, over-ordering, rejection and/or partial adherence to prescription.

Wasting Medicines

7. 'Wasting' medicines was not spontaneously understood. When raised within the research, respondents guessed it related in some way to the proper disposal of out-of-date medicines (which most respondents throw away in the bin or down the sink).

8. In line with the literature review, very few respondents admitted to **recklessly wasting** medicines but they did recognise many situations which have been pinpointed as reasons for 'wastage'.

9. However, respondents initially did not link the term 'wastage' to the non-usage or part-usage of medicines. This is because of the provenance of the medicine and the reasons/justification for not using them:
   a. Either the respondent paid for the medicine themselves (OTC or prescription charge); in which case they perceive they 'own' them and have the right to use them or not, or to store them for others;
   b. Or the medicines have been left over as a result of changing circumstances beyond the patient control (patient death, end of pregnancy);
   c. Or waste is a natural by-product of the process of trial and error in 'tailoring' medical care to the individual (i.e. dosage changes due to worsening or improving of condition). In this respect, it is linked to the patient's response to the medication and is in some way to be **desired.**

10. There was a fundamental 'disconnect' between respondents use/non-use of their medications and the concept of **wasting NHS money:**
    a. The NHS budget is seen to refer 'bigger' treatment (operations, scans, investigations). Doctors and surgeries are discussed in terms of their micro-budgets (over which they have control).
    b. In contrast, medicines are accessed and received in a fairly anonymous way (written instructions from their doctor handed over the counter) and;
    c. are free or freely 'dished out' (prescription quantities belie potency and valuable medical resource).
    d. In a pharmacy, medicines share an environment with more consumer/commercial items like shampoo, make-up, sun-tan lotion; in a hospital, medicines are limited in quantity and seen as somehow **more 'medical'.**

11. Medicines in the hand of the patient thus do not have a visible connection with **cost and NHS resource. Respondents did not see the problem.** Fortunately, the holistic concept of wastage is very easy to access given the smallest amounts of information:
    a. A reminder of the inclusion of medicines within the NHS remit;
    b. An indicator of the scale of the problem;
    c. And an insight into the 'double cost' of both wasting the medicine in the first place and paying to dispose of the medicine in the second place.

12. Respondents – without exception – became advocates for change and wanted to see different policies and more responsible management. Being aware that they will become ill and vulnerable at some point in their lives, they reported themselves prepared to change behaviour and expectations to facilitate more control over their medical attention, expenditure and resource management.

Reducing Wastage – Response to Stimulus

13. Labelling medication with prices has significant challenges:
    a. Higher and lower prices are linked to quality of drugs, seriousness of illness, importance of condition and of patient – therefore, medical issues are at stake.
    b. In particular, cost and price has implications for patient self-worth (possibly important amongst a minority of the elderly and amongst more vulnerable patients such as in treatment of mental health e.g. depression). These were not specifically recruited in the work but were present or represented.
    c. There is huge potential for comparison and dissatisfaction from those who pay for their medications – and therefore, political ramifications may be large.

14. Given the various routes to wastage (most of which seem to be beyond the control of the patient), there seems to be little possibility of reducing that wastage via pricing information.

15. Of all the options considered, the concept of 'the precious NHS' seems to encapsulate both the level of care required and the tone that should drive that care:
    a. The NHS is valuable and an important resource
    b. The patients are valuable and deserve care
    c. Every last care should be taken to control the NHS resources to best effect
    d. Every last care will be taken by those in the NHS when patients are being looked after

16. However, once they understood the financial aspect of the problem, respondents wanted a wider campaign which actively underlines the issues and educates doctors and patients to think holistically about their health care.

17. Indeed, there is room – and mandate – for a significant shift in the UK medication landscape towards greater control and accountability. This shift is necessary both 'up-stream' of the prescription and at point of use. Most effective is seen to be a return to caution and care in prescribing, dispensing, packaging and expectations: respondents wanted to see smaller doses being made (by drugs manufacturers) and made available (for example, through prescriptions in 'weekly segments' and through doctors focusing on *diagnosis* rather than *prescription*).

* * * * * *

III Detailed Findings

1. Literature Review

The literature review (first tranche) was conducted prior to the field research at the Royal Pharmaceutical Library in South London. The second tranche was conducted some days after fieldwork. Over a total of five days, researchers trawled through the current academic research and found hundreds of papers giving information on the general issue of health, illness and medication, the patient/doctor dialogue, wastage of medication. Keyword searching was used during the first trawl, as well as direct searching for specified material.

A report on the search has been created separately. However, key facts that were included within the discussion amongst groups included:

- More than 8% of the NHS annual budget is consumed by the purchase of drugs.
- Only half of all patients take their course of medicine as prescribed.
- 11% of patients (5 million people) never even start their course of prescribed medication.

Reasons for non-adherence and potential wastage revealed in the literature included:

- patient old age
- confusion or forgetfulness of patients (regardless of age),
- concern over side-effects,
- confusion with the wide array of drug formats,
- poly-pharmacy (multiple co-morbidities and medications),
- an entire combination of drugs being re-dispensed with a repeat prescription (when a patient had only run out of one item),
- over-prescription (in terms of volume/packaging aspects which lie at the door of drug manufacturers as much as with GPs)

- and death of the patient (eliminating the need for prescription altogether).

These data helped to shape the discussion and analysis of the field research and provided rich 'fodder' for the respondent debate. They allowed the research team to sense-check the experiences of respondents being relayed back, and many of the reasons for non-compliance were indeed found in the fieldwork as well.

The literature review was useful and worthwhile in that respect. However, there was no indication – as far as it was possible to ascertain – that any academic work has been undertaken to address the specific question of this research. No study shed any light on the possibility of reducing the incidence of wastage by any type of on-bottle labelling interventions. To that end, this project has charted new territory and adds to the field of knowledge in the area of waste reduction and compliance.

2. Overview – Health, Illness and Medication

2.1 Personal Views of Health and Illness

Within the research process, respondents established a presumption towards 'health'.

Across all groups, including older respondents (with multiple serious co-morbidities) and younger/mid-age respondents with long-term severe challenges (such as chronic asthma, life-threatening allergies), the vast majority of those interviewed considered themselves to be **healthy to a greater or lesser extent**. Children seemed to be exempt from this, by virtue of their immaturity:

> *Kids do need an awful lot because their immunity is so low that they have to have loads of things – obviously they need their Calpol and their ibuprofen but their immunity is so low…and their body is always changing – until they go through the hormonal changes …they need lots*
>
> 25-34 BC1 females (North)

Of course, everyone could identify a time when they had been 'unwell', and this was not necessarily in the far distant past (indeed, for some respondents, the visit to the doctor/pharmacist had been 'this morning/this week'). However, their own medical symptoms were separate from the discussion of 'illness'.

Instead, they used the terms 'poorly', 'not very well' and 'unwell' instead to indicate below par experience: 'he's fine, he's just not very well'.

Even with serious long-term conditions and significant symptoms, although such respondents were willing to discuss their experience and to name their diagnosis, their report of their current condition did not include the term 'ill'.

Respondents seemed to be judging their capacities against an internal and highly personal barometer; if they could function on a day-to-day basis, they were not 'ill'.

For most, being 'ill' (which necessitates seeing a doctor) was an option of last resort.

> *People my age that I know they very rarely to go the doctors – I just go and buy a packet of a paracetamol – unless it's really bad and I can't take it and then I will go to the doctors*
> C2DE parents of children under 15 (Mids)

> *When you don't feel very well, oh yes, I do go to my doctor, yes*
> C2DE parents of children under 15 (Mids)

> *I were that poorly, I had to phone up…*
> 25-34 BC1 females (North)

In many cases, 'Illness' was somehow more of an event in its own right and typically disruptive of day-to-day functioning. Respondents spoke about the time they were 'really ill'. As well as specific physical symptoms, on a conceptual level it was reported as accompanied by:

- ⇒ Lack of choice or control over self/body
- ⇒ Fear/concern
- ⇒ (Often but not always) some intervention/attention from others

Several people could pinpoint someone (usually older and often female) who was 'always ill' and whose daily functioning was limited by their inability to 'get on with things'. These people were felt to:

- ⇒ actively seek out opportunities to limit their own choice or control over themselves;
- ⇒ define themselves by their fear or concern of their well-being; and
- ⇒ direct lots of energy, time and resources to getting intervention and attention from others by emphasising their physical disabilities.

It is beyond the scope of this research project to investigate the relative cause and effect direction of these behaviours. However, many respondents

within this research used the example of someone who was 'always ill' to explain their perspective of the prescription/medical system and their access to medical attention when they themselves were ill. Such people, seeking frequent medical reassurance, were given diagnosis and 'volume' prescriptions that (happily) confirmed their poor physical health.

> *Hypochondriacs – my mum is…proper…every day if she could. There's nothing wrong with her or she just fancies the doctor. It's either that or the bingo…If you can't find her at one of them you know she's at home…*
>
> C2DE parents of children under 15 (Mids)

2.2 Medical Attention

For many, the success of the hypochondriac in gaining medical attention was on the one hand something to be judged, and on the other something to be envied. Most respondents reported long waiting times to see their doctor, very short appointments when they were able to get one, and doctors who were rushed and rushing to 'count patients through the door and back out again'.

Where hypochondriacs were perceived to access excessive medical attention and to elicit vast amounts of prescription drugs, respondents reported that they themselves can find it very difficult to gain the attention and intervention that they need once they have been pushed into the category of 'ill'.

> *Naming no names but some people would be at the doctor for everything.*
>
> 65+ Females (Mids)

> *They're all over sixty and since they've retired they've had that many ailments that they're on constant tablets*
>
> 25-34 BC1 females (North)

For some respondents, seeking medical attention has become a game and they were ambivalent about it; one the one hand, they saw unwarranted exploitation of the system which angered them. On the other, they wanted to be successful at getting medical attention and medication.

He gives her stuff to get rid of her…but if I go…
C2DE parents of children under 15 (Mids)

If people think they have something wrong with them and they go to the doctors and want to come out with something
BC1 mums & dads of children under 15, South

Illness renders the person **incapable or less capable**. (This is sometimes welcome, but in most cases, it is unwelcome dependence on others).

Additionally, it is more than just 'physical' symptoms. There is an absence of knowledge which means that even mild/no discernible symptoms qualify someone as 'ill':

I've only been on these tablets for nine months. I started with a bit of a headache and doctor tells us it's blood pressure…I thought it were glasses, but doctor tells us it's blood pressure…early warning
65+ males (North)

Within the groups, there was some indication that degree of illness was in some way related to the expectations of the patient. For example, those who were relatively more debilitated by their biological condition (e.g. working age men with new and/or very severe conditions), were more likely to say that they were currently 'ill' (compared with others who may have similar symptoms but were female, or not working).

In some cases, respondents were not ill, they were merely '**getting older'.** Respondents seemed to draw reassurance from this fact – even though it did not alleviate symptoms or give them more choice. What it did do was normalise their state and give it a more stabilised, less dramatic framework than 'ill'.

In fact, the drama associated with being 'ill' seemed to be the factor that most people wanted to avoid (this was especially true amongst the men). The newly diagnosed, for example, tended to exhibit fairly high levels of fear or concern relating to their condition.

In these situations, the doctor assumes the control: patients are reliant on the doctor's knowledge and there is limited dialogue over what is being prescribed.

I think that you'd only say something to the doctors if it didn't work, you tend to be guided by the doctor
BC1 Mums & Dads of children under 15 (South)

In some respects, this was tolerable to some respondents. However, there were strong perceptions that doctors have an agenda other than patient welfare. The suspicion was that doctors are given large quantities of medication by pharmaceutical companies and have to 'get rid of them', and that their decision to prescribe is based on this interest.

They gave me two big tubes and they said only rub it in a small area. One would have been absolutely ample.
25-34 BC1 females (North)

They give you a piece of paper and you end up with two carrier bags full
C2DE parents of children under 15 (Mids)

Similarly, some respondents felt that doctors got paid in some way to prescribe specific things or were limited by their surgery budget to what they can prescribe.

More than anything, as already touched upon, respondents perceived that doctors wanted to get the patient 'through and out' – that their salaries were linked in some way to the number of people they saw in a given time period. In light of these facts, the patient-doctor relationship tends to be tinged with cynicism and mistrust.

The doctor prescribes you the cheapest and they don't work so you have to go back
65+ males (North)

Given the background presumption towards health, the psychological and emotional factors accompanying illness and the negative halo surrounding medical attention, the factors necessary for good adherence to medical advice seem to be noticeably absent.

Respondents tended to characterise their willingness to take prescribed medicines in terms ranging from reluctant compliance through to downright rejection:

- ⇒ I've got to take it (medicines as an 'order' – compliant without choice)
- ⇒ I'll take it until I get better again (medicines as a 'life-raft' – compliant to a point)
- ⇒ I must be really ill if he's put me on this (medicines as a 'diagnosis' - adherence through fear)
- ⇒ I don't want to be ill (medicines as a 'trap' – non-adherence through rebellion)

Throughout their experience of being prescribed medication, fulfilling the prescription and taking (or not taking) their medication, respondents perceived a struggle to regain control.

2.3 Medication

Medication becomes symbolic of the amount of attention and care they are receiving. These respondents were concerned about whether it is in the correct quantity or targeted at where it's needed.

At its very core, medication becomes more than a solus activity (me and my tablets). Under discussion, it is swiftly aligned with fears about their vulnerability in a wider system. Respondents wanted to know whether they have an NHS with a good system of checks and balances.

Given that the majority see themselves as inevitably becoming vulnerable within the system, moves to reintroduce control and accountability are welcome.

2.4 Attitude and Behaviour Differences

There were some specific differences between respondent groups, the most significant of which are outlined below:

Over 65s

The reality of their health situation was conflicting. One the one hand, they professed serious conditions such as thyroid, heart and blood pressure, arthritis, cancer. Typically, every individual had some permanent complaint they were happy to 'own'.

This group had the widest range of conditions and complaints and, as expected from the literature review, multiple medications were being taken by both men and women (some medications taken to counteract the effects of others).

As mentioned, this group were very unlikely to see themselves as being ill, and most likely to see their conditions as just part of the nature of getting older. The majority viewed their conditions as just "something that happens": they were not necessarily 'ill' (although not 100% healthy).

> *It's what happens – it's about getting older*
>
> 65+ Females (Mids)

In fact, in some cases, their conditions were presented less in terms of 'taking something' from the individual, but rather as 'adding something' to their list of identifying characteristics. Many talked about 'my' condition, and there was a general feeling of humour from many of these respondents about their physical health.

> *I think it goes with the age – doctor tells us we're poorly then government tells us they can't afford to get us better!*
>
> 65+ males (North)

Amongst this group, accessing medication was a regular event, usually on repeat prescription, and it was taken as a matter of course. They had the shortest time-lag between prescription and usage and they had no reason not to take or finish medication. Since this group were reliant on medication in order to function, they did not have much space not to take prescriptions, to throw things away or not finish courses.

Well he gave me eight and I took them for four days and that's the course. And you don't have them left over

65+ males (North)

There was little admitted medication 'storage', stockpiling, sharing or abuse of free prescription status amongst these respondents. (Other respondent groups however recount this age group as most likely to share the 'bounty' of their free prescriptions with friends and relatives.)

We're the same as well – my husband's nanan brings us paracetamols and we've got that many I've given them my mum and my mum gives them my sister and we've all these paracetamols and I don't like to say no to his nanan because she thinks she's doing us a favour

25-34 BC1 females (Mids)

This group, however, did not report themselves as wasting medication – other than should they die mid-prescription (a factor which was out of their control).

Mid-age men

Amongst this group of men between forty-five and fifty-four, there seemed to be two constituencies, depending on the state of their health. Those with fairly severe problems were moving towards life-long illnesses; others had no discernible problems as yet.

The 'healthy' men were unaware and unworried about their health in general. They were driven to visit the doctor when they suffered extreme symptoms, and were more likely to report that they merely wanted information and a second opinion 'diagnosis' that nothing serious was wrong with them. Of all the groups, these were the respondents most likely to say that they might stop taking medication the minute they felt better, regardless of what the prescription dictated. In fact, they did not necessarily expect, want or need prescriptions when they visited the doctor.

You're not going for drugs, you are going for a diagnosis and if that diagnosis is drink three cups of water three times a day and take a Beecham's powder…

Men 25-34 C2DE (North)

> *You're feeling ill for three days and you're so ill you go to quack's and he says to be honest with you you've been ill for three days, I don't want to prescribe you anything, you're fighting it off yourself…*
>
> Men 25-34 C2DE (North)

The 'ill' men could be distinguished in several ways. The newly-ill especially were most uncomfortable and fearful. They spoke about their condition and its treatment in very passive terms, seemingly having lost much of their form and independence. They had become quite 'medicine clutching', especially where a more permanent/severe condition had been 'discovered' via minor symptoms; in these cases, the respondent spoke as though the doctor had all the answers and he had none.

There was some attempt amongst this group of men to transfer themselves into the 'not ill, just aging' category. However, characteristic to this age group was a lack of definitive diagnosis, and much discussion of medication trial and error. Unlike the older respondents or those younger respondents on permanent medication, this group were still finding their correct treatment and most likely to report that they had tried a drug and – it not having worked – they had to stop taking it. As well as these trials adding to the confusion and worry that is experienced by the respondent, the medicine wasted by volume amongst this group was perceived as higher than any other.

Mid and younger females

There was (amongst this sample of females from twenty-five to fifty-four), a small amount of long-term illness. However, they also reported frequenting the doctor or pharmacist on behalf of others such as children, their spouse or partner or their parents.

Of all groups, these respondents were most likely to report stockpiling medication. They tended to store medication that they had bought or received over prescription and to see them as a whole family resource regardless of which family member had the original illness or condition. There was also a tendency to share medicines amongst their circle (acting

as 'surrogate diagnosers' for their family as a first step before going to see the doctor).

Many of them had 'little medicine kits' and some had even taken this to another level with spare medicine kits and extensive medical supplies ready and waiting just in case. These respondents were responsible for the longest time-lag between receiving a set of medication and using that medication. They had, for example, powdered antibiotics from some years ago, or an epi-pen which was many years out of date, but would still 'do' in an emergency. Whilst many of these respondents paid for their prescriptions, this did not seem to make a huge amount of difference to their tendency to store. Initially, then, this group seemed to be less wasteful of medicines than any other.

> *I've probably got out of date paracetamols and I know I've got an out of date epipen and I keep that because I've got allergies and I've not been to get another one so I'll keep that in case I need it*
> 25-34 BC1 females (North)

However, since they tended to store for many years, and not to have many occasions to use, their medications were thrown away in bulk at irregular intervals. There was little pattern as to what was thrown away or why; some respondents found they had sudden clutter-clearing events in an attempt to 'get in control of their lives'. Others found that the arrival of new material (for example, another large tub of eczema cream) meant that their supplies no longer fitted the container or space they were stored in; excess had to be thrown out.

Similarly, where medications had been supplied to these women during pregnancy, the end of that period also resulted in medical items being thrown away. In some cases, these were items of high value.

> *I even got some powdered medication that I could mix with water to take to France with me last year just in case my little boy got an ear infection…and I've still got that for in case ..I've even got a box in my car with bandages and Savlon and scissors*
> 25-34 BC1 females (North)

Overall, this group accessed large amounts of medication, which was mostly for fairly low-level illnesses. Medication was not often completely used up at the time of purchase; many cough syrups, lotions and creams were prescribed in large amounts that were on an 'as required' basis. What was thrown away was done in bulk: waste volume was high.

People who don't pay for prescriptions

In general, these respondents exhibited less good health. This was either as a result of their work and income levels or because of life-long illnesses such as asthma. Several of these respondents reported other family or friends with a psychosomatic or hypochondriac relationship to their health.

Of all the groups, those on free prescriptions were most likely to consider medication as a 'bounty'. They showed least control over renewing whole prescriptions when they didn't need them. Often they were the recipients of free items from family and friends or were donors of such items as 'gifts'.

> *Depends on your doctor… Anything is on prescription if you've got a good doctor and he'll listen to you*
>
> C2DE parents of children under 15 (Mids)

> *My nana gives me a box of paracetamols every time I go there – she's like take a box of paracetamols – thanks nan!*
>
> 25-34 BC1 females (Mids)

As might be expected, these respondents were least likely to think about the concept of 'wasting' medication. Since they did not pay, they found it difficult – or at least confusing to consider the financing of the medication (it's 'free').

> *I think that if you don't pay for it, then you don't worry about it so much – what's another tube of cream?*
>
> BC1 mums & dads of children under 15 (South)

> *I've got a card because I've been pregnant and it lasts twelve months and I can go and get anything for free so I've been and stocked up on things like asthma pumps and things like that - so when it comes to the time when I have to pay for it, I don't have to because I've got one already*
>
> 25-34 BC1 females (Mids)

They did not consider the monetary cost of health or illness. This is true even where – despite being eligible for a free prescription – they chose to pay for medication over-the-counter. This was sometimes done where they felt the prescription drug was weaker than that which was available to buy. Those on free prescriptions were most difficult to explore wastage with – until they perceived the direct benefit to themselves of tackling the issue.

3. Waste (not): Current Understanding of Medication 'Wastage'

3.1 Treatment Routes and Choices

At each incident of illness, respondents reported themselves to have four choices open to them. In ascending order of likelihood to create medicine wastage, these are:

3.1.1 Ignore/self-treat

- Men and women reported themselves equally likely to ignore or self-treat (with non-drug intervention) many colds and other obviously-temporary illnesses.
- This decision is made where medical attention seems too difficult to access compared with the severity or discomfort generated by the illness.
- This weighing up of conveniences includes an assessment of the likely value of an appointment in terms of time to speak to a doctor and quality of the dialogue/information that might be offered.

This step generates no medication wastage because no medication is prescribed. However, by delaying treatment at an early stage, it may contribute to a more serious problem requiring greater intervention.

3.1.2 See medical 'surrogate'

- As mentioned, this is likely to be a female member of the circle – a wife, mother, neighbour, friend or sister with perceived greater diagnostic experience than the respondent themselves.
- This option is chosen in lieu of trying to access doctor and is motivated largely by a desire to eliminate the possibility that the illness is serious.
- Since the medical surrogate is unlikely to be medically trained, the advice or opinion is based on their experience, commonsense or

personal judgement. However, since the surrogate is very likely to have hoarded medicines from other people, their access to potentially potent medicines is great – a potentially very worrying combination.

There is, however, no wastage from this route because the medication was already available. Whilst it might otherwise be thrown away, and thus – on the one hand – prevents it being wasted, on the other hand, it is perceived by those who tend to stockpile as a justification for their actions.

> *I've got everything. I've got a big tub. I've got a little bag and a big tub and I've got everything for diarrhoea and constipation and plasters and bandages and antiseptic sprays and eye-drops and I've got everything….cough medicines, cough sweets, and if anything,…I've got it – what do you need?*
>
> 25-34 BC1 females (North)

3.1.3 Buy over the counter

- Generally perceived as a route to stronger medications or a suitable alternative to queuing for an appointment.
- Greater control over what is bought/taken and the packaged volume of medication.

This was viewed as not generating waste because the medication is paid for – and thus 'owned' by the respondent. What they do with it is now their own choice.

> *I think regardless of what I've paid for them if I feel well then I'm not going to take them*
>
> 25-34 BC1 females (North)

In most cases it is poured down the sink or put in the bin when they no longer need or want to store it. A small minority take their unused or left-overs to the pharmacist for 'correct disposal' but in the main, over the counter medications that do not get used up are treated as rubbish.

> *In the bin…like with stuff that's used, use sparingly and we've checked the date and if it's out of date, or you don't see no signs of it working then it's gone – in the bin. Give it a week or two and if it's not working then in the bin. I don't leave things like that lying round the house*

C2DE parents of children under 15 (Mids)

Why do people go to the trouble of taking them back to the chemist if they are just going to destroy them? Why don't they just throw them in the bin themselves?

65+ males (North)

I pour mine away down the sink

25-34 BC1 females (North)

3.1.4 Get 'official prescription'

- The general perception is that doctors would hand over a prescription to most people in order to get them out of the appointment.
- In some cases, this is exactly what the respondent went for - (insurance/employment leave/benefit) – and may not be cashed.
- In other cases, this is not necessarily what the person went for. An opinion and clear course of action to alleviate symptoms without making things worse would have sufficed.
- Since the medication is 'free' (the patient pays at most for the pharmacy contribution), there is limited potential for waste.
- Any left-overs should be recycled and thus made available to others – rather than destroyed.

Medication which has been prescribed by a doctor but which remains unused was not felt to count as waste. As well as the various psychological reasons for not adhering to prescription, respondents also felt that some medication would be left over as an inevitable result of official 'trial and error' necessary to tailor a treatment to an individual.

It's a lot of money. But if you are on tablets then that's what the doctor has given you.

65+ Females (Mids)

They try you out on something and see how you react and then try something else – and they don't take them back

BC1 mums & dads of children under 15 (South)

Over and above this, respondents felt that they were not being wasteful if they did not take all their medication since they had had no involvement in the prescription quantity or duration. Their repeat prescriptions were pre-

printed and never checked. In general, they felt there was little importance, value or effort being placed on non-used medications, which were probably (it was felt) of slightly lower strength than might be bought over the counter.

> *I think a lot of the stuff they give you is cheaper than what you pay for it – so I'm not sure if they are wasting money*
>
> C2DE, 35-54 women (South)

> *It's like – "Have you got enough Calpol?" It's as though it's throwing it down your face– you sometimes you just have it for the sake of it*
>
> C2DE parents of children under 15 (Mids)

In general, then, NHS medication was not leftover through deliberate action or recklessness. Various medical, personal and circumstantial routes contributed to it being left over once a person had regained their control (stopped being ill).

> *I went in a care home and residential and there was this lady had got a box a footstool that big and the nurse came in … she opened it up and … she said "whose looking after you?" and she cleared it out and just left her what she should have. And there was two carrier bags full*
>
> 65+ males (North)

> *you get a course of say twelve tablets over a set period, and nine times out of ten you only need half of them and you're starting to feel better it's starting to clear up and the rest goes in the bin... why fill your body up with more tablets?*
>
> C2DE parents of children under 15 (Mids)

None of these was deemed to constitute 'wasting the medication'.

> *If I go the doctors and I get a prescription for my sons asthma or eczema or my psoriasis then it is up to me whether I ingest it*
>
> C2DE, 35-54 women (South)

What was very noticeable to all respondents was that – although they had no control or contribution to make to the quantity of prescription – they felt large amounts were being handed over to them. In cases where the medication was not used up (for all the legitimate reasons discussed), high volume packs were pinpointed as contributing to an over-supply of medication in patients' hands. It was here that respondents felt left-over medication issues might arise.

They probably give you more there's that many people in the doctor's they give you loads just in case you go back the week after so they just give you loads so maybe you don't have to go back so often

C2DE parents of children under 15 (Mids)

My mum and dad, they give them two months supply of medication and then they go back for more… they give them big boxes of 200 tablets of dissolvable tablets, and they are repeating them every two or three months…

C2DE parents of children under 15 (Mids)

They gave him six months supply and said come back in three months. And when he did they gave him a different dose. And they did that two or three times

25-34 BC1 females (North)

3.2 So Where is the Waste?

Respondents were able to access several related elements closely aligned with the concept of medicine wastage. However, there were several barriers which prevented them from comprehending the problem overall.

As the research process unfolded, respondents were able to understand **incorrect disposal** (which they could stretch to encompass 'green disposal') of medication that was left-over. They were able to accept that they should not pour medications down the sink.

Further on within the discussion, they were able to understand **wasting money** in general, but in connection with the NHS, they found it difficult to attach a financial aspect to the bottle in their hand. In their minds, the NHS budget covered hospitals, operations and beds – and was not overtly aligned to finances because it is experienced as 'free' at the point of use.

In some way, tablets and medicines seem to sit outside of this resource. This is partly because respondents felt these were accessed in 'shops' rather than medical institutions: local pharmacies are not perceived as any form of NHS outpost or agent.

Respondents could understand the concept of **reusing leftovers** and as such conserving resource. Several had noticed that they had taken brand new unopened packs back to the pharmacy (because of 'trial and error' medication programmes as discussed above). None were spontaneously aware of what happened to those packages – certainly, incineration was not considered as a possibility by the vast majority.

Unprompted, many respondents expected pharmacies to recycle unused medications; however, none of them would wish to have recycled medication from someone else's leftovers. However, they felt that the 'Third World' would welcome the opportunity to access these unused drugs since 'they could not afford their own'.

Why don't they sell them abroad or something?
Men 45-54 C1C2 (Mids)

In essence, overall, respondents of all ages and lifestages found it incredibly difficult to understand what might be meant or referred to by the term 'medicine waste'. Medication seemed to occupy a space both outside the NHS budget and beyond shortages they perceived in other areas of their medical care.

4. An Informed Response: Triggers to Change

4.1 The Information Journey Towards 'Waste Reduction'

Given the very complex background within which medicines and wastage are located, the initial task for addressing the issue and finding mechanisms to reduce it needed to start by identifying triggers for change. The triggers were cumulative and were evident across the sample in a very consistent fashion.

Initially, small reminders of information about their medicine began to draw respondents very quickly into a wider, social context. Such reminders can be very basic: in the research, respondents were asked 'so who pays for our medicines'?

The argument for change built in small incremental steps – the one leading naturally on from the other – with appropriate information given at each step.

Diagram A shows the way in which the argument built towards insight and the message of waste became amplified, leading towards a desire to reduce waste. Whatever the measures used, the principle of moving from an individual to a mass 'epidemic' of medicine wastage creates a powerful picture and explains the problem where none was perceived by respondents before.

From their own knowledge, respondents were aware that people do not finish their medicines (and they pour them down the sink or throw them in the bin). At this stage in the argument, they did not see a problem with doing this.

> *Christmas we went through my mum's cupboard and we found 45 boxes out of date of stuff that she hasn't even opened.*
> C2DE parents of children under 15 (Mids)

I'd make a fair bet that the most tablets don't go back to the pharmacist

65+ males (North)

Once they were told the monetary value of medicines taken back to the pharmacist to dispose of correctly (they know this is only a proportion of what is wasted), they became somewhat interested and began to consider disposal problems.

Understanding that value as a percentage of the annual NHS budget, and understanding that it can't be recycled and instead the medications are burnt, the amount of pollution, chemical waste, financial waste becomes clear to respondents, and they became concerned.

Finally, once they were made aware of the double cost (the money it costs to buy and then to burn wasted drugs), they spontaneously linked this to their interests in the wider NHS and the lack of other resources that they will one day need (and already know about).

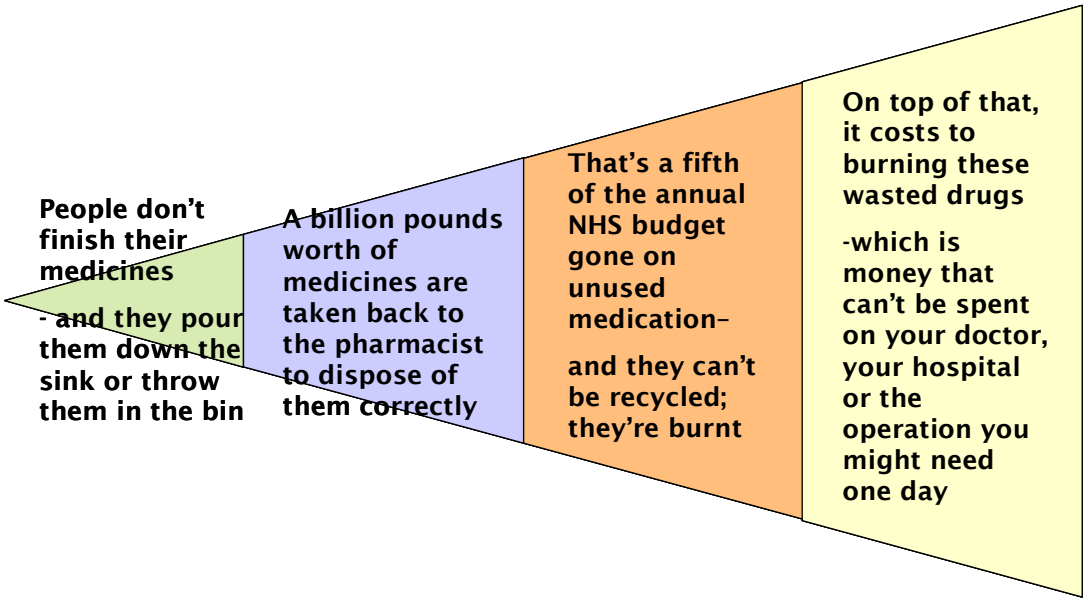


Diagram A:

The incremental argument from an informational perspective, revealing the issue to respondents by beginning with their own widely acknowledged behaviour and 'amplifying' the effects of that in context

4.2 The Psychological Journey Towards 'Waste Reduction'

An understanding of the scale of the problem increased respondents' connection with the issue. In particular, understanding the amount of drugs that are brought back for correct disposal and knowing that this is only the tip of the iceberg, respondents start to step away from their individual issues and concerns about their medication.

Once they were informed about the financial costs of unused medicines in relation to the overall annual budget, respondents started to see a large amount of 'waste'. They began to become aware, once confronted with the potential 'medicine mountains', that these drugs have potency and chemical properties (and are not just sweeties and syrups) with little effectiveness.

> *I think now you've said one billion, people like us are going to start thinking oh I must do something with it. I won't just waste it.*
> 25-34 BC1 females (North)

> *The figure that you've got that's wasted is probably not a true figure because there's people like me who would throw it in the bin. So that's probably doubled or trebled.*
> 25-34 BC1 females (North)

At this point, respondents became concerned about the very real harm that might be done by incorrect disposal.

The final cumulative trigger was the double cost – the first cost of paying for the medicines and the second cost of incinerating wasted medicines. Respondents were unaware that medicines were incinerated; once they began to comprehend this fact, they became very motivated to address the issue and regain control. In the context of the whole argument, this information – because previously hidden - is a very powerful motivator. Respondents spontaneously made the link between being liberal with medication 'versus' getting hospital treatments for more serious things. At this point, they took up the issue and started to look for solutions.

> *We're paying for it once through taxes and then paying again to have it be destroyed*

25-34 BC1 females (North)

That could be put back into the NHS that. What about more nurses and that?

25-34 BC1 females (North)

And if they said if they got rid of this problem then they could get rid of this MRSA thing then people would be more aware of it

C2DE, 35-54 women (South)

Clearly, care needs to be taken in directing the concern and desire for action at this point. Some respondents needed help to remember what they had already concluded about medicines and disposal.

Why don't we say 'if you don't use it, flush it down the toilet'?...don't waste tablets, don't take them back to the chemist, flush them down the toilet.

65+ males (North)

This simple mechanic began to reframe the picture in respondents' minds. Some respondents moved from a 'self-centred' focus (what they could get from their doctor/how others were getting more than they were) towards a more 'social' awareness very quickly. **Diagram B** below indicates the general direction of the process of understanding medicinal wastage. At the early stage of comprehension, large numbers of respondents still vacillated between beginning to understand the territory and falling backwards into old ways of seeing things.

Building the argument around medicines within a social context, more 'adult' language and attitude is reflected by a large majority of respondents. Indeed, medications began to be seen as a resource, not just a boundless quantity of 'goodies' to be plundered or won away from doctors.

And the stuff he gives her it's good stuff as well...I think she just does because she's frightened of...if it's there the pain goes away. She's got cupboards and cupboards...it's ridiculous.

C2DE parents of children under 15 (Mids)

I just put it in the bin...but then you think about it – they're all lying out somewhere in a big pile

25-34 BC1 females (North)

The psychological 'journey' from unaware through a vacillating response towards awareness and finally a strong commitment to change is not a long and tortuous one; simply put, with the minimum of new information, respondents moved swiftly through the stages to become advocates for 'waste reduction'.

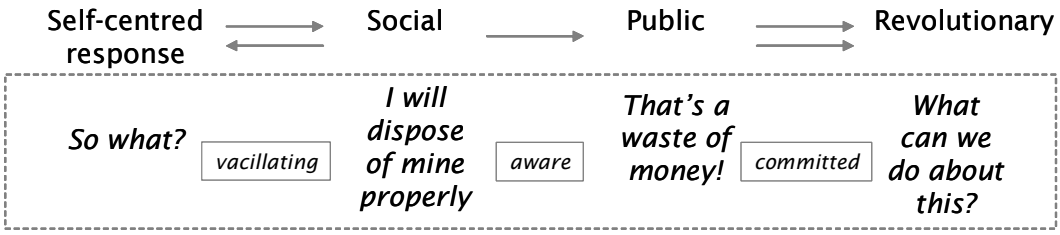


Diagram B:

The incremental argument from a self-centred response towards wasting one's own drugs, through a social conscience leading to greener disposal, to a desire to address the issue, benefiting the NHS and ultimately the individual

5. Response to Stimulus – On-bottle labelling propositions for tackling wastage

The subject of on-bottle labelling was introduced through a 'spot the difference' discussion around two labels (of the type shown at a) below). One had a mid-level price which was not too dissimilar to the standard prescription charge operating in the UK at present. The other had no price. It was felt that this set up would establish the spontaneous reaction to any changes to a medicine label, and the extent to which change would detract or distract the patient from the prescription information.

Following on from the initial responses and opinions, the rest of the stimulus was shown to respondents in random order although the pair of labels high and low price were shown together (randomly ordered) in order to establish the effect of a real-world raft of differing prices next to each other and the effect of over-night patent lapsing leading to very rapid price reduction.

5.1 The Label Proposition – with price

Within the groups, as mentioned above, respondents were shown a large-scale A4 version (as above) of a label with a price for the medicine on it, and a non-priced 'twin' version of the same label. They were asked what they noticed on the mocked-up labels which might address the problem of medicine wastage.

Respondents were then prompted towards the price information on the large-scale label, and asked for their opinions. They were then shown a small version (on-bottle mock-up), which showed how the information would be seen in a real-life situation.

In the larger version, the price was not immediately noticed, and respondents did not suggest it spontaneously as a way of reducing waste. When it was pointed out to them, some respondents assumed it was always on labels.

In the smaller version, it was almost unreadable and blurred into the wealth of existing numerical and instructional type on the label. In the scheme of things to read when taking medicines prescribed by the doctor, it was perceived to fall into the lower sector of 'relevant information'.

However, once the debate had been raised, respondents had a number of questions regarding the metric; was this price per tablet/per bottle/per certain strength of tablet?

As intended, links were made between the prescription cost and the medication cost. In this version, the price label was made to be very similar to the current level of prescription cost; respondents (especially those who actually pay for their prescriptions) were interested (as expected) as to what the charge would be to them.

Amongst those who did not pay for prescriptions (including a minority of elderly respondents), questions were raised about intentions to start charging payment for healthcare. However, the majority of those who were 'free-prescription' were clear that this did not apply to them; as the information was very obviously 'not me' it was largely ignored.

> *If you are ill and you need them you are going to take them. If you're not you're not.*
>
> 25-34 BC1 females (North)

> *If you are on Social Security and you are paying six quid for that…that's a loaf of bread, that's five loaves of bread*

From the literature review, a number of potential measures against which to evaluate the performance of the labelling were drawn together. It is clear that any solution for on-bottle labelling to reduce wastage must:

1. Draw sufficient attention
2. Not impact on the efficacy of the medication/treatment *(i.e. not affect the psychological belief in the value or strength of the medicine to the detriment of the patient's recovery)*
3. Indicate the value of an overtly NHS resource
4. Change behaviour or at least prompt a review of behaviour towards not wasting
5. Not cause offence
6. Be appropriate for the elderly and those on multiple life-long medications *(i.e. not cause anyone to stop taking medication)*

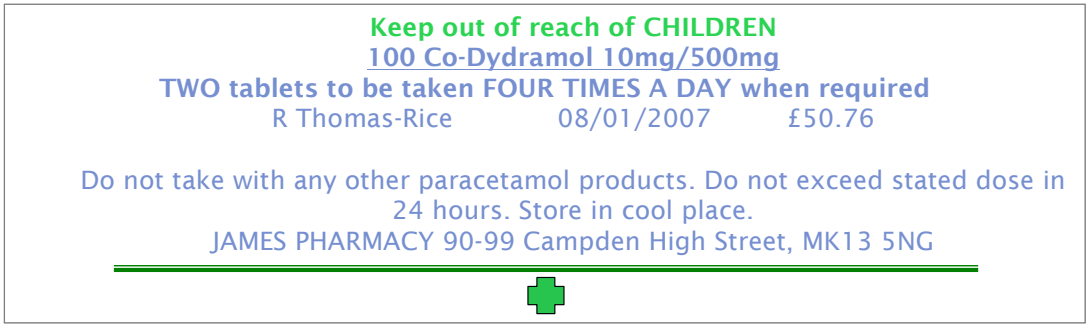
In this case, the on-bottle price:

a. did not draw sufficient attention at first instance for the majority, although that was possible because they were not used to looking for it;
b. did not seem to affect the efficacy of the medication/treatment, because it was so close to the current prescription charge as to have little impact on any respondent;
c. gave little information about the value of the medication and did not link this to a wider NHS 'resource' argument – again because it was so close to the current prescription cost;
d. was unlikely to prompt review of behaviour for similar reasons;
e. did not cause great offence, but raised some doubts about the likely motives and next steps of the NHS and added to (rather than detracted from) suspicion about doctors motives; and
f. had no discernible affect on those under 65+ who were 'free prescriptions', although fro a minority, the issue of payment was a little insensitive and not appreciated.

We have paid. We have paid from 14 to 65. We've paid. We've paid.
65+ males (North)

But we have already paid – we've been paying all our lives
65+ Females (Mids)

5.2 The Label Proposition – with high price



The respondents were shown a large (A4) version of a medicine label with a high price, (markedly higher than the prescription charge). In the groups, the order was rotated between this and a markedly lower price label in order to determine the effect of extreme price changes on respondent attitudes and behaviour.

Because they had already been primed with the first label, the majority of respondents were able to find this information easily. A medicine label is easily navigable because fairly static in layout.

Even a price of around £50 on a small bottle of tablets caused no surprises; some medications are known to be extremely costly and respondents felt this would be within the realms of probability. The steep price was linked to effectiveness for some respondents – especially the mid-age and younger males who felt this would indicate a strong drug which would get to the heart of their problem.

I would think that it was really good quality
BC1 mums & dads of children under 15 (South)

I would think that I was really sick if it cost that much to get me better
BC1 mums & dads of children under 15 (South)

There was, however, no sense of proportion given to the fact that the named drug on the bottle was a simple painkiller – co-dydramol - rather than, for example, an expensive cancer drug; respondents lacked awareness of what was a reasonable price for a given medicine.

Both free and paid for prescription respondents began to express uncertainty over whether this was the 'price' to them: would a drug that was this expensive really be free at point of use?

> *I would notice and think that's it a bit off, I should have the option of paying £5.76*
>
> BC1 mums & dads of children under 15 (South)

> *Why should I be made to feel guilty every time I pick up my prescription that it has a big price stuck on it, we've always owned our own house, paid our way so I think I should be entitled to what I need – it would make me mad*
>
> C2DE, 35-54 women (South)

The high price caused some respondents to feel that they would take greater care when using these drugs; others gave a minority view that they would keep them and not take them (including, but not exclusively, the elderly).

> *I might think I don't want to take them now.*
>
> 65+ Females (Mids)

> *Or if someone is an older person and they've paid into the system all their lives and they might start to feel guilty – or get confused and not take them. They might think they have to pay for them and they can't afford them so they might not go back*
>
> 25-34 BC1 females (North)

Worryingly, some respondents in the middle to lower SEGs indicated that they would expect people (including even doctors themselves) to start selling the tablets for personal profit. This exacerbated their antagonism towards their own doctor. Prescription drugs (such as Valium) were already regarded as a form of 'currency'; as such, there was concern that the effect of wide-scale pricing would be to encourage profiteering and to enshrine street values.

> *It sounds awfully like they are blaming the consumer so that they can hike the prices up elsewhere, it's nothing to do with our health*
>
> C2DE, 35-54 women (South)

Why has he put it up? Cos he's [the doctor is] pocketing the money…

C2DE parents of children under 15 (Mids)

If you've got some drug addicts and they've got morphine or whatever and its says its sixty quid, he's not going to take it, he's going to sell it and then start taking drugs again

25-34 BC1 females (North)

5.3 The Label Proposition – with low price

As stated above, this label and the higher price label were rotated in order throughout the sample.

The majority of respondents were able to find this information – since primed and similar issues were raised as for the higher price regarding the exact nature of the metric. There was a certain limited response to the information on its own: unlike the high price, there was little discussion value in such a low cost.

I'd think perhaps if they've left a nought off somewhere else like the dosage?

C2DE, 35-54 women, south

Comparatively, however, it was felt that these were 'the weak drugs' that the doctor was giving you 'to palm you off'. The general nature of the discussion stimulated by this lower price was about paucity of medical treatment and doctors just wanting to get people out of surgeries. As such, the price was perceived to be related both to the strength of the medicine (a weak and poor substitute) and the level of care (the patient deserves only the 'cheap stuff').

But if it had a really low price like 15p you'd question the worth of the drug, the quality of it

BC1 mums & dads of children under 15 (South)

The cheap drugs should be for minor illnesses

65+ males (North)

Is it a cheaper brand? They're not so good

C2DE parents of children under 15 (Mids)

Is it not as good?

65+ Females (Mids)

The low price linked in with feelings of cynicism and suspicion of the medical service, increasing the possibility in patients' minds that the medicine they were receiving was of little value – potentially exacerbating the waste of it. For some, being prescribed low price medicines was a marker that their personal value was also low.

I'd be disgusted because I have to pay – why should people on benefits get them free when I'm paying more than I should and I have to pay for everything anyway

25-34 BC1 females (North)

I think I'd wonder why I was getting the cheap ones if I was on the other end of the scale – I want the dear stuff! Like sparkling wine or champagne

C2DE, 35-54 women (South)

For those who would have to pay a prescription charge of around seven pounds, the idea of being faced with the true (low) cost of their medication was unwelcome, although in some cases, could be balanced out over time.

With some respects, I think that we might be paying over the odds now but if ever I need surgery or whatever…I've got a little girl who needs hearing aids so I think I've got a lot through another way through Health Service

25-34 BC1 females (North)

Or if it was 15p you'd think why am I paying £6.65?

BC1 mums & dads of children under 15 (South)

If it were 85p you wouldn't be paying six pounds to pay for that. The chemist or pharmacist would say you can buy that cheaper.

65+ males (North)

That's just asking to wind people up and for the chemist to get an earful when people go in

25-34 BC1 females (North)

5.4 The Label Proposition – with traffic lights

This approach was liked by some respondents. The colours were attractive, especially to younger females. Because it was colourful, it was felt to stand out against the other information on the label. The device was linked with current food labelling and the traffic light system for healthy eating. As such, it appeared at first glance to be familiar.

> *That's like the food thing*
> BC1 mums & dads of children under 15 (South)
>
> *It looks like a suntan cream – high factor*
> C2DE parents of children under 15 (Mids)

However, the 'stop/go' meaning underlying the traffic light system made interpretation difficult. Unlike with foods where red equates to 'consume small amounts', the red on the medicine label had nothing to do with consumption. For respondents, there were connotations with 'taking or not taking' the medication, which could negatively impact on treatment.

> *It's on all the foods – red's no good for you*
> 25-34 BC1 females (North)
>
> *Like going into the supermarket and looking at what's good for you salt and that.*
> 65+ males (North)

When refocused towards the task of reducing medicine wastage, the warning lights were reinterpreted as being possibly something to do with a value-for-money scale that the NHS might put on the medication. In some

ways, for a minority, that became equated with its efficacy (i.e. "this is an expensive medicine and it doesn't necessarily work brilliantly = red").

> *We don't want to be treated as a cost to the NHS. We don't waste our medicines.*
>
> 65+ Females (Mids)

Most respondents found it hard to read. As it would be even smaller on-bottle, , this was felt to limit its viability.

Finally, as well as difficulties in translation, there was a lack of exactness and real-world comparability. This helped avoid some of the difficulties of placebo effect from pricing but ultimately led to disengagement with the measure.

> *What's the green yellow and red? Not being funny – they ain't interested a lot of people. If they ain't got to pay…*
>
> C2DE parents of children under 15 (Mids)

> *I think if you don't have the price on there, then I don't think that you'd worry that you have the 'cheaper' one*
>
> BC1 mums & dads of children under 15 (South)

5.5 The Label Proposition – with money scale

The money scale consisted of pound signs of varying sizes and was thus immediately clearly located and obviously linked in some way to the 'cost' of medication. However, it was very starkly viewed as being about money rather than 'medical care', and took consideration swiftly into the realms of lack of doctor/patient courtesy, and appointment times. As such, it

exacerbated the level of suspicion about doctors and revived the struggle for control that patients experienced.

> *If I saw the tiny little pound sign in the evening when my son was having an asthma attack and I was giving it to him, I'd think that he should have had the better quality one*
>
> C2DE, 35-54 women (South)

As well as raising the fact that doctors have to operate within budgets, the pound signs significantly offended a minority – especially those who felt they had paid and were now being reminded that there was a bill outstanding. It placed the NHS as a creditor, rather than a resource.

> *I don't like that, it's a bit in your face, and it's on a dotted line like a cheque, like a warning, like its telling you off*
>
> BC1 mums & dads of children under 15 (South)

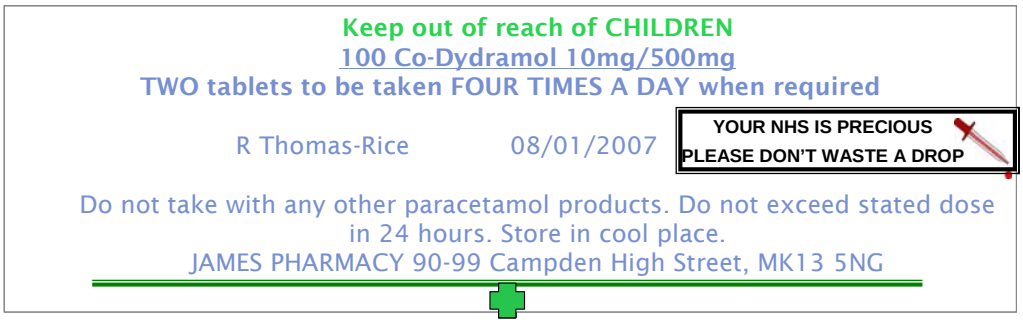
The judgement was felt somewhat to extend to the patient's behaviour in getting ill and thus 'costing' the NHS money. As such, it was felt to be a statement from the NHS about rising costs rather than healing people. Amongst the elderly respondents, both males and females, there was a perception that this scale was very 'aggressive', and the tone of voice it implied was strongly offensive. The majority of other respondents reacted negatively to a lesser extent.

> *Now I was not offended by any of the others, but this – pound pound pound – that has made me angry. I think that's terrible. Is that what they are saying – you are costing us this much every time you take a tablet?*
>
> 65+ Females (Mids)

Overall, the scale was felt to impart a level of information that might be more accurately about cost than the traffic light system above, and as such, might have more impact on behaviour.

> *If it's in your face then people would take more attention*
>
> C2DE parents of children under 15 (Mids)

5.6 The Label Proposition – with 'precious drop'



Partly because it was coloured and partly because it was a *different type of image to the rest of the label,* respondents were drawn to and easily understood the message. It was felt to be a clearly 'marketing/public service' message and as such, they expected to be asked to do or to consider something.

Although the logo and its message were drawn together for the purposes of the research and may not be the ultimate solution going forwards, respondents felt that it incorporated certain elements which helped address the task. As such, on a principle level, these are covered below:

The polite and courteous *tone of voice* was well received by respondents and to de-escalate rather than exacerbate the battle for medical attention. The elderly respondents were particularly pleased with this.

> *I think that is excellent*
>
> 65+ males (North)

> *That's better and straightforward. It's not degrading to you and it does not make you feel guilty*
>
> C2DE, 35-54 women (South)

The *content* of the message was also welcome: a direct reference to the NHS and an encouragement to value it as a 'precious' resource.

> *Young uns know the price of everything but the value of nothing.*
>
> 65+ males (North)

The specific *vocabulary* was also well received. 'Your NHS' links with ownership and locus of control being close to the patient. 'Precious' was considered appropriate and was well liked by many respondents.

> *Yes, the Health Service is precious. I like that*
>
> 65+ Females (Mids)

> *I'm not sure about the red blood drop – I think that it's quite good though*
>
> BC1 mums & dads of children under 15 - south

The *symbolism* of a 'drop' and 'dropper' was felt to be relevant. It provided recognisable imagery while being indicative of a high level of care and attention (this was too much care for a minority of respondents especially C2DE men who wanted more blunt messaging). For other respondents, the question of whether a dropper was more appropriate for liquids than tablets was raised fleetingly.

> *It could say "you are paying for this, don't waste it"*
>
> BC1 mums & dads of children under 15 (South)

> *I think the one with the dropper on it. Don't waste a drop. It's putting a picture in your mind*
>
> 25-34 BC1 females (North)

Overall, many elements of this option combined to bring a positive response across the groups. There was, however, concern that the writing could be missed on the label. From that perspective, respondents spontaneously started to look at other ways of using this option where it would be more visible and attract greater attention and behaviour change.

Spontaneous interest in putting it on the back of the bottle and in wider communications immediately suggests the potential for wider application. In this case, the 'precious drop' measure was easily located and easily decoded as having personal reference to the respondent and their behaviour, without being judgemental and offensive.

Unlike many of the other solutions, this type of route would seem to have no potential for negative impact on the expectations of the medicine in

terms of its strength, quality or efficacy. The emblem prompted a likelihood to consider both the NHS and the medication usage with greater care. Furthermore, it also prompted some debate about whether there could be more dialogue between doctor and patient. The tone of the message encouraged collaboration and a shared set of values towards patient care.

The proposition was uncontentious – the NHS *is* a precious resource.

5.7 Summary of Response to Stimulus

In summary, across the essential characteristics of visibility, efficiency and neutral impact on medical treatment, the stimulus options can be scored in the grid below as:

	Price	High Price	Low Price	Traffic Lights	Money Scale	Precious drop
Visible	X	Yes	Yes	Yes	Yes	Yes
Affect on medication	Yes	Yes	X	X	X	Yes
Value NHS message	X	X	X	X	X	Yes
Reduce wastage	X	Yes	X	X	X	Yes
Not offensive	X	Yes	X	Yes	X	Yes
Appropriate for all	Yes	Yes	Yes	Yes	X	Yes

6. Wider Communication Requirements – what they really, really want

6.1 The Potential for a Wider Communications Campaign

As the research progressed, in each group, there were calls for a wider communications plan to tackle the issue of wastage and to raise awareness of the problem. Respondents were not backward at coming forward with spontaneously generated solutions and these included:

- Posters in doctors' surgeries and pharmacists
- Poster campaign on buses, in the streets, on the trains
- Television and radio marketing campaigns
- The 'precious drop' emblem used
  - on the backs of medicine bottles (a sticker on its own)
  - on the prescription itself
  - on posters
  - on bags

Two sample 'adcepts' were shown and were met with positive response:

These examples were felt to be moving very much in the right direction, although some respondents – especially, but not exclusively, the males – wanted stronger messages and a harder hitting campaign (much like the current NHS stop smoking 'hook' campaigns on television).

Television advertising would be better than all of this you know
65+ males (North)

The adverts on the television – the one with the lady with the hook in the mouth, I remember it – I know it's horrendous but it gets your attention

25-34 BC1 females (North)

I'd notice that, it looks like my medicine cupboard!

BC1 mums & dads of children under 15 (South)

This call for more shock and impact was a reflection of the seriousness and scale of the problem as they perceived it. It is not clear from the research of the stimulus shown whether the 'adcepts' themselves would be suitable to raise the issue cold, and it is recommended that proper communications research is conducted to find the most appropriate way to bring the issue to mass attention. However, in principle respondents felt that others should know about and would respond to more information about medicines wastage.

Everywhere! Anywhere and everywhere!

25-34 BC1 females (North)

I think it would be helpful for people to know what happens to these drugs – I've never thought about it – but I think it would be helpful for people to know what happens…

25-34 BC1 females (North)

All the initially proposed solutions had focused on the on-bottle/medication-in-hand opportunity to get people to treat and value the medication they were given with care and attention. For many respondents, this was a new thought and the rationale behind it – linked to overall resourcing implications for the NHS - was motivating. Overall, however, a wider campaign was felt to be more suitable to draw attention to the problem.

Have something proper hard – there's kids in other countries that don't even have shirts on their back and they're desperate to have the drugs that we're throwing away…

C2DE parents of children under 15 (Mids)

How many people die from cancer every year because they can't afford the drug and you're just wasting the money

C2DE parents of children under 15 (Mids)

6.2 Greater Intervention 'Upstream' of the Medicine Bottle

Throughout the research, the strongest comments were directed at the wastefulness and 'wrong-thinking' further 'upstream' of the medicine bottle. There were many earlier points at which patients felt wastage was occurring and respondents wanted to see these points addressed too.

In particular, they highlighted the potential for wastage:

- At the point of consultation
- With the surgery
- With the doctor
- At the pharmacist
- With the dispensing system
- With the drug packaging and manufacturing system
- With the overall lexicon of medicines as gifts/bounty/indicator of 'real illness'/consumer items

Respondents themselves took up the cause of waste reduction and carried on from the on-bottle solution and wider media campaign into an attack on the system that produces the wastage. Indeed, they generated a number of interventions that they felt would address the issues:

Intervention 'upstream' – with the doctor

In particular, the distinction was drawn between going to see a doctor in order to get medical advice and going to see the doctor in order to get a prescription. For many, the latter was being given as a badge of care, rather than what was needed, for example a 'proper' *diagnosis and advice* sheet of paper. They felt an innovation like this would satisfy the need of most people for 'confirmation' that they were ill, without leading into the area of wasting medication.

Respondents also firmly called for doctors to be able to prescribe *'trial size'* for trials where the medication might only be taken once or twice before its effects were known and a proper assessment of the patient response could be made.

Furthermore, there were calls for the doctor/patient relationship to include greater *emphasis* on preciousness of resource and a re-emphasis of the importance of following medical direction. In effect, respondents were saying they would want to be reminded each time they were prescribed something of its value and cost.

Finally, many respondents wanted to see *surgery accountability for returns*. The current process of anonymous returns to the pharmacy was felt to allow too much leeway for individual doctors to over-prescribe and under-control.

Maybe they should put it on posters in the doctors, I think that's the best course of action in conjunction with your doctor being more careful

BC1 mums & dads of children under 15 (South)

Why don't you make it compulsory to take things back not to the chemist but to the doctor…and then they can see this chap has been bringing these back for the last three months. Why? They can see – make them more accountable.

65+ males (North)

Intervention 'upstream' – pharmacist/medical companies

As inferred above, some measures that involved doctors were also felt applicable to pharmacists and medicine manufacturers. Particular innovations included:

- Smaller pack sizes (less than 28 days)
- Very small (two or four tablet) trial sizes
- Leaflets in with the prescription to encourage compliance
- Pharmacist emphasis on preciousness of resource
- Pharmacist emphasis on correct disposal (important to direct patients towards correct, rather than free, disposal)
- Pharmacists to remind respondents that they were taking medication prescribed <u>for a reason</u> – respondents wanted a recognition and re-emphasis that this was potent medication underpinned by a science and a serious philosophy (not just tablets and syrups)

Intervention 'upstream' – with dispensing system

Suggestions for development included other mechanics within the dispensing system, for example:

- The ability to cash only the bits you need e.g. one month supply, but in four individual weekly dispenses (tear-off strips)
- The ability to pay the prescription charge at the first visit regardless of how many of the strips you cash in/pay prescription charge in stages

- Encourage more, shorter visits to pharmacist rather than one difficult visit to the doctor (pharmacist acts as holding bay for the drug as required)
- Monitor cashing rates for 'repeat prescriptions' – and challenge those patients who frequently access large amounts of 'stuff' on prescription

Intervention 'upstream' – with more information

Finally, respondents wanted a wider set of information against which to use medicines 'properly'. They wanted to move away from the slightly amateur forum in which medicines were stockpiled, hoarded, shared and given as gifts. They felt that more information about the correct disposal of all medications together with accurate and reasoned data on how 'keepable' items like cough syrups really are, would tighten the boundaries and help them behave more responsibly.

Clearly, many of the upstream measures require a united collaboration between *multiple agencies*. However, it is worth noting that as far as respondents were concerned (which infers consumers in general) *the NHS is a single agency or entity* and these alterations should be implemented as soon as possible to prevent more money being burnt.

* * * * *

Appendix

RECRUITMENT QUESTIONNAIRE

Interviewer: _____ _____

Respondent _____

Address: _____

_____Post Code: _____

Tel._____(Hm) _____ (Wk)_____(Mobile)

Please note method of recruitment: (tel/f2f/snowballing/list) …….

Q1. Do you or do any of your close friends or relatives work in the following occupations*?*

Market Research	1	Close	Journalism	2	Close
Advertising	3	Close	Marketing	4	Close
Television	5	Close	Citizens Advice Bureau	6	Close
Design	7	Close	Civil Service/Government	8	Close
Law/solicitor/court service	9	Close	None of above	0	Recruit

Q2. Have you ever taken part in a market research depth interview or group discussion on any subject?

YES 1 When was this?_____
What subject? _____
NO 2 CLOSE -> **IF TOOK PART IN ANY MARKET RESEARCH IN LAST 6 MONTHS**
CLOSE -> **IF ATTENDED ANY MARKET RESEARCH AT ANY TIME ON SAME SUBJECT**

MALE 1 FEMALE 2 **CHECK QUOTAS**

OCCUPATION/WORKING STATUS _____

A B C1 C2 D E **PLEASE CIRCLE AS APPROPRIATE**

ETHNICITY: (please circle)

White **Black** **Asian** **Mixed Race**…… **Other** ……

AIM FOR INCLUSION OF ETHNIC RESPONDENTS APPROPRIATE TO AREA

INTERVIEWER: IT IS IMPORTANT THAT THE RESPONDENT BELIEVES THE RESEARCH IS ABOUT WIDE HEALTH AND LIFESTYLE ISSUES IN GENERAL

READ OUT
We are an independent research company who are conducting research amongst the general public with regard to improving information services for them. At no time will your name be passed to another agency, including marketing agencies, government departments or any other third party. Your answers are confidential and your name will not be attributed to any of your comments.

Q1. Could I ask you how you travelled here today?

Bus	1	INTERVIEWER: ALL TO PROCEED TO NEXT QUESTION
Car	2	
Train	3	
Walk	4	
Other	5	

Q2a. Could I ask whether you have any children under the age of sixteen living at home with you?
Q2b Could I ask whether you have any dependent adult over the age of 65 living at home with you?

	CHILD		**DEPENDENT ADULT**	
Yes	1	CHECK QUOTA	1	CHECK QUOTA
No	2		2	

Q3. And could I ask whether you have any pets living at home with you?

Yes	1	INTERVIEWER: ALL TO PROCEED TO NEXT QUESTION
No	2	

Q4. Without wanting to go into any details, can I ask which of the following best describes you:

On medication for a long-term illness/permanent condition (including allergies)	1
Recently visited a doctor for a prescription for myself but that's rare	2 CHECK QUOTA
Generally average in terms of being prescribed things for my health	3
Don't really get ill enough to need a prescription	4
A total fitness fanatic – and never prescribed anything	5

Q5 Could I ask you with regard to any family that you have responsibility for (like children, parents, spouse) whether any of them are:

On medication for a long-term illness/permanent condition (including allergies)	CHECK QUOTA
Recently visited a doctor for a prescription for themselves but that's rare	
Generally average in terms of being prescribed things for their health	
Don't really get ill enough to need a prescription	
A total fitness fanatic – and never prescribed anything	**GO TO Q6**

Q5a. And the last prescription that you went to get, for yourself or for someone in your family, was that a repeat or a first time prescription?

REPEAT	CHECK QUOTA
NEW	

Q5b. And how many items roughly were there on prescription?

1	CHECK QUOTA
2-4	
5+	

Q6. Can I ask you how many miles a week you walk?

1	1

2+	2	INTERVIEWER: ALL TO PROCEED TO NEXT QUESTION

Q7. Would you say that you and/or your family are interested in/have tried Alternative Medicine?

YES	1	
NO	2	INTERVIEWER: ALL TO PROCEED TO NEXT QUESTION

Q8. Do you or any member of your close family that you have responsibility for (like children, parents, spouse) have any conditions that are long-term and serious (when we say serious, we mean serious enough that you get a prescription for them) like:
Epilepsy, Asthma, Heart Disease/Angina, Indigestion, or anything other long-term 'prescription level' illness

	Self	**Child Dependent Adult**
Yes	1	1``````````````````1
No	2	**2**``````````````````**2**

Q7. Could you say whether you have heard of any of the following: Acupuncture, Hot Stone Therapy, Homeopathy, Meditation, Ayurvedic Healing

YES, HEARD OF SOME	1	
NO, HEARD OF NONE	2	INTERVIEWER: ALL TO PROCEED TO NEXT QUESTIONS

Q10a. Could you say whether you could qualify for free prescriptions or would you have to pay?
Q10b. Can you tell me whether your partner/spouse could qualify for free prescriptions or would they have to pay?

	Self	**Partner**
Free Prescriptions	1	1
Paid Prescriptions	2	2

IF Self Free = RECRUIT AS 'FREE PRESCRIPTION'

IF Self Paid = RECRUIT AS 'PAID PRESCRIPTION'

INVITE RESPONDENT TO DISCUSSION/DEPTH INTERVIEW AND ISSUE WITH INVITE, DIRECTIONS AND PRE-TASK.
PLEASE EXPLAIN THE IMPORTANCE OF COMPLETING THE PRE-TASK AND BRINGING IT ALONG TO THE DISCUSION WITH THEM.

DISCUSSION GUIDE: Medicines Labelling

Focus Group Interviews

N.B. This Guide indicates the areas to be explored in the discussion, the likely order in which topics will be covered and the kinds of questions and techniques which may be used. However, as this is qualitative research, the approach will be flexible depending on the dynamics of each interview.

Verification of objectives: The project intends to provide evidence for and against the concept of putting pricing information on medicines. What effect – positive, negative or none – would this information have on levels of wastage of medicines? Are there any types of pricing message that would have a positive impact on wastage? Are there any types of respondent who would be adversely affected by this information (e.g. elderly patients feeling they should **not** use up their expensive medicines)? Is there any other activity that could be more usefully employed to tackle wastage?

Introductions & Warm Up

Moderator to introduce self, explain the process of market research to respondents and the format of the interview /discussion

Explain topic of discussion is Health in general, and people's experiences of getting and taking medication. Explain that the research is about understanding lots of different opinions, reiterate need for honesty to help with research and ***reassure on confidentiality****.*

Individual/paired introductions: brief introduction of self and family plus ice-breaker like favourite film/number of houses lived in since a child/little known fact etc…NB Important to get group warmed up as initial fears about embarrassment could reduce effectiveness

Establish 1 - Health Context of Individual

To understand:

- Current medication status of self and others in family (both upwards and downwards in family tree)
- Prescription requests, fulfilment and charges
- Medication usage

MODERATOR: I would like to ask you about your experience and familiarity with the world of medicines and medicinal treatments. We are talking about all sorts of things so that would include medicines, tablets, ointments, inhalers, stockings or anything else that might be prescribed by a doctor for a health-related issue. We won't be asking detailed personal questions, so you don't have to reveal anything personal about your own health, but you may have friends or family who have been ill and you can also use their experiences in the discussion, so it's not just limited to your own health.

Questions:
What sorts of medicines and medical treatments are available on prescriptions? *Probe for specifics, but don't need brand/medical names or who has used them, just a broad range to funnel down from.*

Thinking about yourself, your friends or your family, would you say you/they were often ill? How often would you go to the doctor/hospital/a health professional for an illness?
Would you say you have lots of prescriptions? A few? Who has most? What sorts of people have most?

Could you say what sorts of illnesses people go to see the doctor/health professional for? *Probe for thinking about parents, children, siblings, friends?* When was the last time you went? Would you/they have had a prescription from their appointment? Did you/they use the prescription at the pharmacist or forget about it? Did you/they pay for the prescription or was it free? Have you/they bought any other medicines over-the-counter as well or instead of their prescriptions? What have they – or any of their friends and family - bought?

Establish 2 – Wastage levels

To understand:

- Own experience of wastage
- Awareness of wastage of others
- Possible reasons for wastage

MODERATOR: If you go into anyone's bathroom cabinet, you quite often see medicines and medical treatments. Sometimes these are left-over. Some people complain that they don't know what to do with these.

Questions:
Thinking about your own family, would you say this was like you? Does this remind you of anyone you know? What sorts of people have lots of medicines hanging around? Are they really left-over? Why might they be left-over? Why were they not finished or used-up? Why else? Probe for list of reasons why someone might not have used all their medicine. Elicit all spontaneous suggestions first then prompt as necessary with 'out of date/didn't work/felt better anyway/person died/forgot/doesn't like it/worried it was too strong/ don't really like medicines so try to only use minimum/etc etc'

Do you have any personal experience of not using up all your medicine? Are you on medications at the moment but not taking the doses/not using it up according to the written instructions? *MODERATOR encourage people to refer to their pre-task diary to aid their recall of whether they took any medicines on this day.* Why did/don't you not use it all? Do you know anyone else who didn't/doesn't? Going back to thinking about where this medicine came from, was it an over-the-counter or a prescription? Does it make a difference to how you use it?

What would/did you do with the unused medicine or treatment? Is it still at your house? What could you do with it? Would you tell anyone that its still there? Would you say something in a future appointment to try and get, for example, a smaller dosage or a better prescription for your needs? Could you tell the doctor you

didn't finish it? If not, why not? What might stop you bringing this up? If yes, what could you say?
Are there any problems or issues to do with people not taking medications according to the instructions? Who and why? Elicit all spontaneous suggestions first then prompt as necessary with: For you? For your family? For your health? For the doctor? For the NHS? For the taxpayer? Others?

Explore 2 – Proposition and alternatives

To understand:

- Reactions to idea of reducing wastage
- Reactions to idea of introducing pricing information
- Reactions to other alternatives

MODERATOR: Almost one billion pounds worth of prescription medicine is wasted in the UK. That means not taken as directed, maybe started but not finished, or just thrown away whole. What are your first thoughts about that? Does it surprise you? Had you thought about this before? Thinking back to all the reasons we have already talked for people not taking their full medication, would you say there was anything to be done to reduce the amounts of waste.

Questions:
Explore fully whether these spontaneous suggestions would be related to the prescriptions medicines or the over-the-counter, and try to focus on the prescriptions. Make sure comments are directed towards reducing waste rather than waste management.

Show boards – give set without prices (A) to one half of group, and set with prices (B) to other half

They are thinking of making changes to the medicines, for example, making the instructions clearer. What are your first thoughts? Would that change the usage for you? For any of your family?

Interviewer - wait for spontaneous reactions to pricing information. If none occurs, ask about what other changes they have noticed on the label.

MODERATOR: This is one idea that has been suggested, putting the price of the medicine on the label. What do you think? Any first thoughts?

Questions:
What would this suggest to you? To others in your family? Would it make a difference to how much medicine you take? Would it put anyone off? What fears would it raise? Any anxieties it might raise?

Show options C and D with identical labels – one higher priced (C) and one lower price (D). Rotate through sample.

What about if you had been on this (C), and you went back and were given this (D)? What would you think? Would anyone have concerns? What might have happened? Would you ask questions?

What about if you had been on this (D), and you went back and were given this (C)? What would you think? Would anyone have concerns? What might have happened? Would you ask questions?

If not raised spontaneously, prompt for whether anyone might feel they were too expensive to take. Show other alternative label propositions, E, F, G, H…rotating through sample

Examine as for C and D, looking at which options are best received, where any groups are significantly put off and what the benefits might be (if any) of putting extra information on the labels.

Explore 2 -other non-label communication channels

To understand

- reaction to other wider communication

Questions:

What other ways could you think of for communicating the issues to others? *Interviewer – explore fully any suggestions. Show I and J as sample adcepts. Explain that these are just ideas of what sort of information might be put to people – and that they are very rough. Look for their impact, acceptability, any responses and discuss how they might be improved. Note: we are not looking for a critique of creative work. We are more interested in whether anything of this nature would be more effective than /as effective as medicine labelling itself in order to achieve the end goal of reducing the amount of wastage.*

Is there anything to be gained from telling people through:

- *their doctor/other professional*
- *their doctor's surgery*
- *their pharmacist*
- *their supermarket*
- *television*
- *posters*
- *bus stops*
- *radio*
- *newspaper ads*
- *other packaging/promotional*

Summing Up

- What, on balance, would you say about the issue of reducing left-over prescription medicines? Is there anything that could usefully be done? What's the best thing to do? What's the worst thing?
- Anything else you would you like to say in response to the discussion/additional comments/ideas for improvement?

Any questions

Thank respondents

APPENDIX: STIMULUS

MEDICINES STIMULUS

COI/DH - 2007

The label proposition – with price

Keep out of reach of CHILDREN
100 Co-Dydramol 10mg/500mg
TWO tablets to be taken FOUR TIMES A DAY when required
R Thomas-Rice 08/01/2007 £5.76

Do not take with any other paracetamol products. Do not exceed stated dose in 24 hours. Store in cool place.
JAMES PHARMACY 90-99 Campden High Street, MK13 5NG

The label proposition – with high price

Keep out of reach of CHILDREN
100 Co-Dydramol 10mg/500mg
TWO tablets to be taken FOUR TIMES A DAY when required
R Thomas-Rice 08/01/2007 £50.76

Do not take with any other paracetamol products. Do not exceed stated dose in 24 hours. Store in cool place.
JAMES PHARMACY 90-99 Campden High Street, MK13 5NG

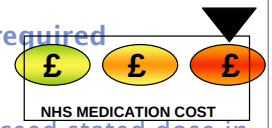
The label proposition – with low price

Keep out of reach of CHILDREN
100 Co-Dydramol 10mg/500mg
TWO tablets to be taken FOUR TIMES A DAY when required
R Thomas-Rice 08/01/2007 £0.85

Do not take with any other paracetamol products. Do not exceed stated dose in 24 hours. Store in cool place.
JAMES PHARMACY 90-99 Campden High Street, MK13 5NG

The label proposition – with traffic lights

Keep out of reach of CHILDREN
100 Co-Dydramol 10mg/500mg
TWO tablets to be taken FOUR TIMES A DAY when required
R Thomas-Rice 08/01/2007



Do not take with any other paracetamol products. Do not exceed stated dose in 24 hours. Store in cool place.
JAMES PHARMACY 90-99 Campden High Street, MK13 5NG

The label proposition – with money scale

Keep out of reach of CHILDREN
100 Co-Dydramol 10mg/500mg
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Do not take with any other paracetamol products. Do not exceed stated dose in 24 hours. Store in cool place.
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The label proposition – precious drop

Keep out of reach of CHILDREN
100 Co-Dydramol 10mg/500mg
TWO tablets to be taken FOUR TIMES A DAY when required

R Thomas-Rice 08/01/2007

YOUR NHS IS PRECIOUS
PLEASE DON'T WASTE A DROP

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JAMES PHARMACY 90-99 Campden High Street, MK13 5NG

Almost £1billion a year is wasted

YOUR NHS IS PRECIOUS
PLEASE DON'T WASTE A DROP

J

Only half of all patients take their prescription properly

What happens to the rest?

YOUR NHS IS PRECIOUS

PLEASE DON'T WASTE IT